

Claims

1. An automatic drawing creation method of constructing a three-dimensional model by using a computer source having a processing device source, a memory source, an input device and an interface, in which

the processing device source executes a processing including; a step of extracting a designated drawing frame from a drawing frame data base that stores drawing frame data on every application uses, a step of projecting a three-dimensional model extracted from a three-dimensional model data base on the extracted drawing frame thereby creating a two-dimensional projection drawing, a step of extracting dimensional line elements in accordance with the shape of the two-dimensional projection drawing from a dimension data base that stores data concerning a plurality of dimensional line elements and deforming them in accordance with attribute values of a product, and a step of compounding the deformed dimension line elements and the two-dimensional projection drawing and outputting the two-dimensional projection drawing as a drawing, based on the operation program of the memory source.

2. The automatic drawing creation method according to claim 1, the method including a step of extracting designated

tolerance values and remarks from a design reference data base
and describing them at designated positions on the two-
dimensional projection drawing when the deformed dimension
line elements and the two-dimensional projection drawing are
5 compounded.

3. An automatic drawing creation system including an
attribute value data base that stores data concerning the
attribute values of a product, a three-dimensional model data
10 base that stores three-dimensional model data of the product,
a drawing frame data base that stores drawing frame data on
every application uses, projection drawing creation means that
extracts the designated drawing frame from the drawing frame
data base, and projects the three-dimensional model extracted
15 from the three dimensional model data base on the extracted
drawing frame thereby creating a two-dimensional projection.
drawing, a dimension data base that stores data concerning a
plurality of dimension line elements, compounding means that
extracts the dimension line elements in accordance with the
20 shape of the two-dimensional projection drawing from the
dimension data base, deforms them in accordance with the
attribute values of the product and compounds the deformed
dimensional line elements and the two-dimensional projection
drawing, and drawing output means that outputs the two-
25 dimensional projection drawing compound by the compounding

means as a drawing.

4. The automatic drawing creation system according to
claim 3, wherein

5 the system includes a design reference data base that
stores data of tolerance values concerning each of the
dimension line elements and remarks, and

the compounding means extracts designated tolerance
values and remarks from the design reference data base and

10 describes them at designated positions on the two-dimensional
projection drawing when the deformed dimension line elements
and the two-dimensional projection drawing are compounded.

5. An automatic drawing creation program containing a
15 program for causing a computer to execute a processing
attained with each of the means according to any one of claims
3 and 4.

6. A computer-readable memory medium that stores the
20 automatic drawing creation program according to claim 5.